

#### IV. REMARKS

1. The drawings, title and Abstract are amended. Claims 1-27 are cancelled without prejudice. Claims 28-94 are new.

2. The drawings are amended to include the legend "Prior Art" with reference to Figures 1-17.

Figure 23 is proposed to be amended to include descriptive legends in each box in the figure.

Black-line versions of the corrected drawings are submitted as Replacement Sheets.

3. Claims 28-95 are not unpatentable over what has been described by the Examiner as Applicant's admitted prior art.

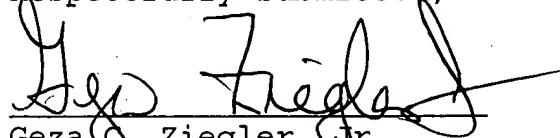
Figure 8 represents one GOP (Group of Pictures). Encoded frames within a GOP depend on each other in time and from one enhancement layer to the next as indicated by the arrows. The vertical direction is indicating different enhancement layers and the horizontal dimension is time. At time 1, the base layers through 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> layers of frame 1 will be used to reconstruct the picture corresponding to time 1. At time 2, the encoder will generate the base layer dependent on the input picture at time 2 and based on the base layer from time 1. The portion of the encoded at frame 2 which corresponds to the 1<sup>st</sup> layer at time 2 will be calculated by the encoder based on the base layer at time 2 and the base layer at time 1. The 2<sup>nd</sup> layer at time 2 is dependent on the 1<sup>st</sup> layer at time 2 and the 2<sup>nd</sup> layer at time 1. The third layer at time 2 is based on the 2<sup>nd</sup> layer at time 2 and the 2<sup>nd</sup> layer at time 1. The decoder will compute the picture at time 2 based on the time 2 layers (base, 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>).

Applicant's invention is concerned with the formation of reference pictures based on high and low priority information. Examples of high and low priority information are given in Figure 17 (syntax elements) and shown in Figure 22 also (motion information and prediction error information). As new claim 28 recites, at least some of the low priority information is not separately decodable without at least some of the high priority information. This is not the case in the prior art discussed by the examiner, shown in Figure 8 of the application. The enhancement layers of Figure 8 ("1<sup>st</sup> layer", "2<sup>nd</sup> layer", "3<sup>rd</sup> layer") are separately decodable from each other and from the base layer. The complete reference frame of claim 28 corresponds to decoding all of the information. There is no such complete reference frame shown in Figure 8. The virtual reference frame of claim 28 corresponds to decoding only the high priority information with the exclusion of some low priority information, at least some of that low priority information not being decodable by itself. There is no frame in Figure 8 corresponding to the virtual reference frame of claim 28. All of the claims incorporate this novel feature by the presence of a virtual reference frame as discussed. Thus, claims 28, 41, 44, 57, 59, 72, 75, 88, 90, 91, 92, 93, and 94 are not unpatentable over Applicant's prior art.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check in the amount of \$3670 is enclosed for a three-month extension of time and additional claim fees, calculated as follows: (Three-month extension of time \$1,020 + 3 extra independent claims X \$200= \$600, + 41 extra dependent claims X \$50= \$2050). The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,



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2 MARCH 2005

Date

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#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date indicated below as first class mail in an envelope addressed to the Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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